

## INTERNATIONAL SEARCH REPORT

PCT/IB2004/050009

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G10L19/00 H04N1/32 G11B20/00 G06T1/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G10L H04N G11B G06T

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, INSPEC, WPI Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	J. FRIDRICH, M. GOLJAN AND R. DU: "Lossless Data Embedding for All Image Formats" PIE, SECURITY AND WATERMARKING OF MULTIMEDIA CONTENTS IV, vol. 4675, January 2002 (2002-01), pages 572-583, XP002277088 SAN JOSE, CA, USA cited in the application * section 2. General methodology for lossless data embedding in digital objects*  ----- -/--	1,9,10, 12,13, 17,24, 27,28



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

## \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*G\* document member of the same patent family

Date of the actual completion of the international search

6 May 2004

Date of mailing of the international search report

07/06/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Quélavoine, R

## INTERNATIONAL SEARCH REPORT

PCT/IB2004/050009

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	FRIDRICH J ET AL: "INVERTIBLE AUTHENTICATION" PROCEEDINGS OF THE SPIE, SPIE, BELLINGHAM, VA, US, vol. 4314, 22 January 2001 (2001-01-22), pages 197-208, XP001189306 ISSN: 0277-786X *section 4. Invertible authentication using lossless bit-plane compression*	1,12,13, 17,24, 27,28
P,X	M. VAN DER VEEN, F. BRUEKERS, A. VAN LEEST AND S. CAVIN: "High capacity reversible watermarking for audio" SPIE, SECURITY AND WATERMARKING OF MULTIMEDIA CONTENTS V, vol. 5020, 20 January 2003 (2003-01-20), pages 1-11, XP002277089 SANTA CLARA, CA, USA the whole document	1-28